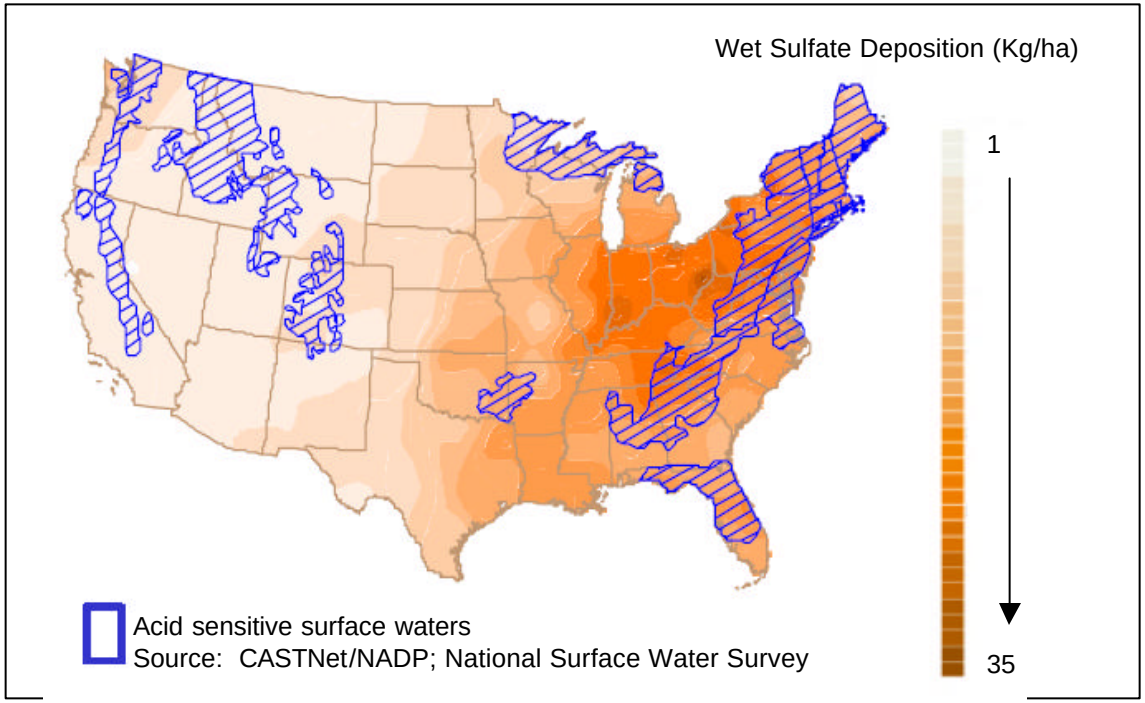
Acid Rain Damages Lakes, Streams, Forests and Buildings

- Acid deposition occurs when emissions of SO_2 and NOx react in the atmosphere to create acidic gases and particles that reach the ground in wet and dry forms.
- The greatest sulfur and nitrogen deposition occurs in areas of the Midwest and northeastern United States which are downwind of the highest SO_2 and NOx emission areas.
- Impacts occur both in the East and mountainous areas of the West.
- Effects of acid deposition include:
  - Acidification of lakes and streams, making them unable to support fish and other aquatic life;
  - Damage to forests through acidification of soil, depletion of soil nutrients, and direct injury to sensitive tree leaves and needles;
  - Harm to buildings, statues and monuments.



- Despite substantial emissions reductions over the last 20 years, significant amounts of sulfur and nitrogen still deposit to acid-sensitive lakes and streams, leading to high levels of acidity.
- Southeastern streams will continue to grow more acidic without significant further reductions in sulfate and nitrogen deposition.
- Many scientists believe that significant further reductions in SO_2 and NOx emissions are necessary to fully protect acid-sensitive ecosystems.